“WESTPAC EXPRESS”

III MEF HIGH SPEED VESSEL "WESTPAC EXPRESS"
EMBARKATION CHARACTERISTICS/PLANNING CONSIDERATIONS

Basic Embark Data:
Overall Length: 101m (331' 5")
Length at Waterline: 86.1m (282' 6")
Beam: 26.5m (90')
Draft (Max): 4.3m (14' 2")

The Ship consists of five "decks":

1. **The Catamaran Hull** which contains the fuel and water tanks, the engine rooms, and machinery spaces

2. **The Main Vehicle Deck**: 20,600 sqft of stowage area. 106" Overhead Clearance with mezzanine deck deployed/181" clearance with mezz deck raised. Integral to main deck is a 70' bi-folding stern ramp and a smaller bow ramp to permit drive-through loading and unloading. Approx two and a half LVS widths port and starboard of centerline has a 15 m/t (33,069 lbs) axle weight limit. One LVS width closest to the port and starboard bulkheads has a 12 m/t (26,455 lbs) axle weight limit. The maximum weight of any vehicle positioned on the main deck cannot exceed 35 m/t (77,161 lbs).

3. **The Mezzanine Deck**: 12,400 sqft of stowage area. 78" Overhead Clearance. 1.5 metric ton (3,306 lbs) axle weight limit. The Mezzanine Deck is deployed in sections and the sqft availability can be adjusted from 0 - 12,400 depending on main deck height requirements.

4. **The Upper Deck (Passenger Deck):** The Passenger Deck contains seating (airline style - reclines 37.5 degrees/has integral table top) for 970 passengers,; an office space for the ship's passenger and cargo operations det; a sickbay with three beds; two food preparation and serving area (fittings are provided to support stowage and heating of airline style meals); and berthing for up to 21 crew. Fitted to the overhead are video monitors for the viewing of movies and briefings. Integral to the Passenger Deck are four Emergency Escape stations equipped with eight emergency escape chutes and eight 125 man enclosed life boats. The crew is trained and certified to operate this equipment, by the manufacturer, per International Maritime Regulations.

5. **Bridge Deck:** The Bridge Deck includes the Pilot House and an area for passenger and cargo pick-up and delivery from Helicopters at Hover. The Bridge Deck is currently not of sufficient strength to support helicopter take-offs and landings or container stowage. Helicopters and containers can be stowed in the Main Vehicle Deck with loading and unloading accomplished via the stern ramp.

Load Planning Considerations:

1. Unlike amphibious warships, HSVs tend to "weight out" before they "square out". The following considerations apply:

a. Ship's Maximum Deadweight (combined weight of fuel, water, pax/crew, vehicles/cargo, stores): 826 s/t.

b. Fuel: 106,461 gal of DFM (6.99 lbs per gallon): 372.09 s/t.

c. Water: 6,000 gal (8.30 lbs per gallon): 24.9 s/t. (Note: Austal 101m has integral fresh water manufacturing capability while underway)

d. Passengers/Crew (240 pounds per individual):
970 pax plus 20 crew = 118.8 short tons.
Stores: (2.6 lbs / indiv meal x 3/day plus one s/t for misc items): 4.87 s/t.

e. Deadweight available for vehicles/cargo (with 970 pax embarked): 305.34 short tons (610,680 pounds)

f. There are no ships forklifts. All cargo must be mobile-loaded or it will not go. If QUADCONS are required for embarkation, they must either be vehicle-loaded or the unit must provide appropriate MHE for on-load and off-load.

Embarkation Requirements:

1. Message Load Plans (MLP). The message load plan will be completed NLT 15 days prior to embarkation. Ensure MLP is complete and accurate. There is currently no CAEMS formatted drawing of the ship--the MLP will be the approved method of transmitting load plans until one is available.

2. Passenger/Cargo Operations Detachment (Ships Platoon). Recommended:
- 1Corpsman
- 1 cook per 300 (only if Cook/Chill or Tray Rats are served)
- 1 messman per 100 (only if Cook/Chill or Tray Rats are served)
- 9 passenger/Cargo Ops Personnel (trained in safety equipment)

The above personnel will be required to report onboard 2 days prior to embarkation to ensure proper training is given.

General HSV capability:
Total load capability (full fuel): 421.74 S/T
Full load: 305.34 s/t cargo, 970 pax @ 240lb est. wt. per (116.4 S/T).
Range (full fuel load): 1250 NM

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SAMPLE FORCE PACKAGES

Infantry Bn, T/O - T/E complete:
- (950) Personnel
- (65) HMMWV
- (25) Quadcons
- 15-day food sustainment (MRE)

SPMAGTF:
- GCE/CE--BN (-), (425) Personnel
  - (16) HMMWV
  - (10) Quadcons
- ACE--HMLA (-), Det MACG, Det MALS (235) Personnel
  - (5) AH-1 Cobra / (2) UH-1 Huey
  - (6) HMMWV
  - Ground Support Equipment / Limited parts/repair capability
- CSSE--CSSD (-) (52) Personnel
  - (1) 5-Ton / (7) HMMWV
  - Limited parts/repair capability
  - 15-day food sustainment (MRE)
  - Water generating capability (+ ship can store 6,000 Gal)

BLT (-):
- BN (-), (425) Personnel
  - (16) HMMWV
  - (10) Quadcons
- Arty Battery (140) Personnel
  - (6) M198 Howitzer
  - (16) 5-Tons / (14) HMMWV

Composite Helo Package:
- (46) Personnel
- (4) CH-46
- (2) UH-1
- (4) AH-1
- Ground Support Equipment
- Limited parts/repair capability

Notable limitations:
- Ammunition restrictions based upon Net Explosive Wt and compatibility (in general, only small-arms can be transported)
- Bulk fuel transport capability is limited--Full M970 refuelers take away significant wt/cube for other cargo; LVS w/sixcon limits qty of fuel capable of transporting; the ship uses DFM, not JP5/8 which is required in USMC vehicles.

SAMPLE HSV ROUTE ANALYSIS: OKINAWA TO BAHRAIN

1. The MV WESTPAC EXPRESS is capable of ferrying limited troops and cargo from Okinawa to the CENTCOM AOR. However, the HSV is still a foreign flagged vessel (Panama) and would require sensitive leveraging of the Ship's owner (AUSTAL), the Panamanian Flagging Authority, and civilian mariner crew (of which, none are US Citizens. Ships crew is made up of Australian, Norwegian, British, and Finnish nationalities). Military Sealift Command (MSC) must request and receive permission from the Panama Flagging Authority and request "safe haven" waivers from existing International High Speed Code (HSC) regulations, which restrict the MV WESTPAC EXPRESS to remain within 300 NM of a land mass while ferrying passengers. This request and waiver process normally takes 5 business days to complete. **This limitation will cease under the FY03-04 lease agreement which requires the vessel to be US flagged and crewed.**

2. Total distance between Okinawa and Bahrain is 5,894 NM. A recommended route would take the HSV from Okinawa to Subic Bay, ROP, to Singapore, to Maldives, to Southern India, to Northwestern India, and finally India to Bahrain.

3. The HSV is capable of steaming 1,240 NM with a full load (up to 970 Troops, and 300 s/t of gear) and maintain a fuel reserve of 20%. Distance between refueling stops can be increased by trading cargo/pax weight for extra fuel. However, without adequate berthing facilities for troops, recommend that troop counts are reduced to 485 –600 in order to maintain adequate quality of life for the 10 day voyage.

4. The voyage time from Okinawa to the Centcom AOR is approximately 10 days, steaming at a best range average of 28 knots. Speeds above 28 knots are not recommend for longer voyages due to fuel conservation.

ROUTE INFO	DISTANCE	TIME	REMARKS
OKINAWA TO SUBIC	896 NM	32	HRS TRANSIT
		6	HRS REFUEL @ SUBIC BAY
SUBIC TO SINGAPORE	1,261 NM	45	HRS TRANSIT
		6	HRS REFUEL @ SINGAPORE
SING TO MALDIVES	694 NM	25	HRS TRANSIT
		6	HRS REFUEL STOP @ MALE
MALDIVES TO S. INDIA	785 NM	28	HRS TRANSIT
		6	HRS REFUEL STOP @ S. INDIA
S. INDIA TO NW INDIA	1,073 NM	38	HRS TRANSIT
		6	HRS REFUEL STOP @ NW IND
NW INDIA TO BAHRAIN	1,155 NM	42	HRS TRANSIT
	5,894 NM	**9 DAYS, 17 HRS**	

Other Considerations:

PROs:

- MV WESTPAC EXPRESS ideally suited for Persian Gulf Intra-theater sustainment. 14 ft draft and integral stern and bow ramp allows access to austere ports throughout the region.
- Considering the potential for cargo and pax backlogs at existing APODs/SPODs during a surge associated with a contingency buildup, the MV WESTPAC Express capabilities (970 pax/3,000sq ft cargo space or 10 C-5 Loads) would favorably augment airlift and sealift platforms in the AOR.
- NEO and HADR operations would gain a significant boost from HSVs in this AOR if the need arises.

NSA, BAHRAIN	0	226 nm **6.48 hrs**	319 nm **9.11 hrs**	455 nm **13 hrs**	679 nm **19.4 hrs**	970 nm **27.7 hrs**
KUWAIT	226 nm **6.48 hrs**	0	505 nm **14.42 hrs**	653 nm **18.65 hrs**	877 nm **25 hrs**	1168 nm **33.37 hrs**
UAE	319 nm **9.11 hrs**	505 nm **14.42 hrs**	0	151 nm **4.3 hrs**	375 nm **10.7 nm**	666 nm **19 hrs**
SEEB, OMAN	455 nm **13 hrs**	653 nm **18.65 hrs**	151 nm **4.3 hrs**	0	224 nm **6.4 hrs**	463 nm **13.22 hrs**
MASIRAH OMAN	679 nm **19.4 hrs**	877 nm **25 hrs**	375 nm **10.7 nm**	224 nm **6.4 hrs**	0	523 nm **14.9 hrs**
PAKISTAN	970 nm **27.7 hrs**	1168 nm **33.37 hrs**	666 nm **19 hrs**	463 nm **13.22 hrs**	523 nm **14.9 hrs**	0
	NSA, BAHRAIN	**KUWAIT**	**UAE**	**SEEB OMAN**	**MASIRAH OMAN**	**PAKISTAN**

CONs:

- Tasking the MV WESTPAC EXPRESS to support contingency operations will incur an insurance premium increase of $1.4 million.
- Tasking the MV WESTPAC EXPRESS will “strand” III MEF forces. Current contingency operations have outprioritized 95 % of III MEF SAAM training (3A2 priority) missions since Sept 11, forcing III MEF to increase usage of HSV to make up for loss of AMC airlift.
- Ammunition restrictions based upon Net Explosive Wt and compatibility (in general, only small-arms can be transported)
- Bulk fuel transport capability is limited. Full M970 refuelers take away significant wt/cube for other cargo; LVS w/sixcon limits qty of fuel capable of transporting; the ship uses DFM, not JP5/8 which is required in USMC vehicles.

MV WESTPAC EXPRESS SCHEDULE AS OF 01 JUN02

Violet highlighted schedule indicates JCS Exercise Support

1 JUN/0800	CHUK SAMET THAILAND	SUBIC BAY, PI			UNDERWAY SUBIC
3 JUN/0800	SUBIC BAY, PI				ARRIVE SUBIC FOR FUEL/45K
4 JUN/0800	SUBIC BAY, PI	KIN RED			
5 JUN/1700	KIN RED	KIN WAN			OFFLOAD COBRA GOLD (1 OF 2) RUNS/RON
6 JUN/0700	KIN WAN	WHITE BEACH			
6 JUN/0800	WHITE BEACH				ARRIVE WHITE BEACH FUEL BUNKER 45K
6 JUN/1200	WHITE BEACH	SUBIC BAY P.I.			
7 JUN/1800	SUBIC BAY, PI				UNDERWAY CHUCK SAMET BALIKATAN TO COBRA GOLD ONW MOVEMENT
8 JUN/0800	SUBIC BAY, PI				OFFLOAD COBRA GOLD/BUNKER FUEL 65K/RON
10 JUN/0800	CHUK SAMET THAILAND				ARRIVE CHUK SAMET/ONLOAD COBRA GOLD (2 OF 2)
11 JUN/0800	CHUK SAMET THAILAND	SUBIC BAY, PI			UNDERWAY SUBIC
13 JUN/0800	SUBIC BAY, PI				ARRIVE SUBIC FOR FUEL
14 JUN/0800	SUBIC BAY, PI	KIN RED			UNDERWAY FOR KIN RED
15 JUN/1500 HRS	KIN WAN ANCHORAGE				ARRIVE/OFFLOAD COBRA GOLD (2 OF 2)/RON
16 JUN/0700	KIN WAN	WHITE BEACH			UNDERWAY WB FOR FUEL 65K
16 JUN//0900	WHITE BEACH				ARRIVE WB FUEL BUNKER 65K
16 JUN/1400	WHITE BEACH	POHANG			UNDERWAY POHANG
17 JUN/1200	POHANG		968	300	ARRIVE POHANG/ONLOAD KITP 02-2 PAX AND CARGO
17 JUN/1800	POHANG	KIN RED			UNDERWAY KIN RED
18 JUN/1600	KIN RED	KIN WAN			ARRIVE KIN RED/ OFFLOAD KITP 02-2 REDEPLM/RON
19 JUN/0600	KIN WAN	WHITE BEACH			UNDERWAY WB FUEL BUNKER 45K
19 JUN/0800	WHITE BEACH				FUEL BUNKER 45K
19 JUN/1400	WHITE BEACH	NAHA			UNDERWAY NAHA
19 JUN/1600	NAHA, OKINAWA				ARRIVE NAHAH
20 JUN-05 JUL	NAHA, OKINAWA				WHITE SPACE /WEATHER DAYS
06-07 JUL	KIN RED PIER, OKINAWA	YOKOHAMA, JAPAN	968	300	FUJI 02-4 DEPLM
07-08 JUL	YOKOHAMA, JAPAN	KIN RED PIER, OKINAWA	0	0	DEPOSITION TO OKINAWA FROM FUJI 02-4 DEPLM
08-31 JUL	NAHA, OKINAWA	NAHA, OKINAWA			OFF HIRE FOR ANNUAL MX CYCLE - DATES ARE STATIC BY CO
1-4 AUG	KIN RED, OKINAWA	TERNATE, PI			TALON VISION DEPLM
5-9 AUG	NAHA, OKINAWA				WHITE SPACE/WEATHER DAYS
10-14 AUG	KIN RED PIER, OKINAWA	POHANG, ROK	1160	326	UFL DEPLM 2 RUNS